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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/905,049	07/13/2001	Hiromasa Shibata	450100-03344	3460

20999 7590 06/10/2004  
FROMMER LAWRENCE & HAUG  
745 FIFTH AVENUE- 10TH FL.  
NEW YORK, NY 10151

EXAMINER
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LEE, Y YOUNG

ART UNIT	PAPER NUMBER
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2613

DATE MAILED: 06/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/905,049

Applicant(s)

SHIBATA ET AL.

Examiner

Y. Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

**DETAILED ACTION**

***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

***Specification***

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "AV Signal Processing Apparatus for Detecting and Analyzing a Boundary Between Scenes".

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-7 and 9-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Nagasaka et al (6,400,890).

Nagasaka et al, in Figures 1-6 and 9-15, discloses an image retrieving method and apparatuses using the same recording medium 2 on which a computer-readable program for AV signal processing for detecting and analyzing a pattern which reflects a significance structure of contents of an AV signal 6 supplied thereto to detect a scene of

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a significant break as specified in claims 1-7 and 9-12 of the present invention, comprising feature amount extraction means 106 for extracting feature amounts of segments each formed from a series of frames which form the AV signal; calculation means 10 for calculating a measurement criterion to be used for measurement of a similarity of the feature amounts between a reference segment and other segments; similarity measurement means 130 for using the measurement criterion to measure the similarity between the reference segment 116 and the other segments 100; measurement value calculation means 228 for using the similarity measured by the similarity measurement means 130 to calculate a measurement value indicative of a possibility that the reference segment may be a boundary of the scene (Fig. 3); and boundary discrimination means for analyzing a variation of a pattern with respect to time of the measurement value calculated by the measurement value calculation means and discriminating based on a result of the analysis whether or not the reference segment is the boundary of the scene (Fig. 6).

With respect to claims 2-7, 9, and 10, the AV signal of Nagasaka et al includes at least one of a video signal 1912 and an audio signal 1922; intensity value calculation means for calculating an intensity value indicative of a degree of the variation (206, 212, 218, 220) of the measurement value corresponding to the reference segment 116; the measurement value calculation means calculates similar segments in a predetermined time area with respect to the reference segment 116, analyses the time distribution of the similar segments and determines a ratio at which the similar segments are present in the past and in the future to calculate the measurement value (Fig. 6); the boundary

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discrimination means discriminates based on a sum total of the absolute values of the measurement values (i.e. non-negative values) whether or not the reference segment is the boundary of the scene; audio segment production means 1920 for detecting, when the AV signal includes a video signal 1912, a shot which is a basic unit of a video segment (e.g. frame) to produce the audio segment; audio segment production means 1920 for using, when the AV signal includes an audio signal 1922, at least one of the feature amount of the audio signal and a no sound period to produce an audio segment (e.g. vertical blanking interval); wherein the feature amounts 1970 of the video signal 1912 at least include at least one of a sound volume and a spectrum 1922; and wherein the boundary discrimination means compares the measurement value with a preset threshold value (e.g. one, two, or three frame comparisons) to discriminate whether or not the reference segment is a boundary of the scene (Fig. 6).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

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not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nagasaka et al in view of Yeo et al (5,708,767).

Although Nagasaka et al discloses various feature amounts of the video signal, it is noted Nagasaka et al differs from the present invention in that it fails to particularly disclose a color histogram as specified in claim 8. Yeo et al, however, teaches the concept of such well known feature in the art.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, having both the references of Nagasaka et al and Yeo et al before him/her, to exploit other common video extraction techniques as taught by Yeo et al in the AV signal processing apparatus of Nagasaka et al in order to capture the important relations within a scene and between scenes in a video.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yoshio et al discloses clip display method and display device therefore.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Y. Lee whose telephone number is (703) 308-7584. The examiner can normally be reached on (703) 308-7584.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (703) 305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Y. Lee  
Primary Examiner  
Art Unit 2613

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